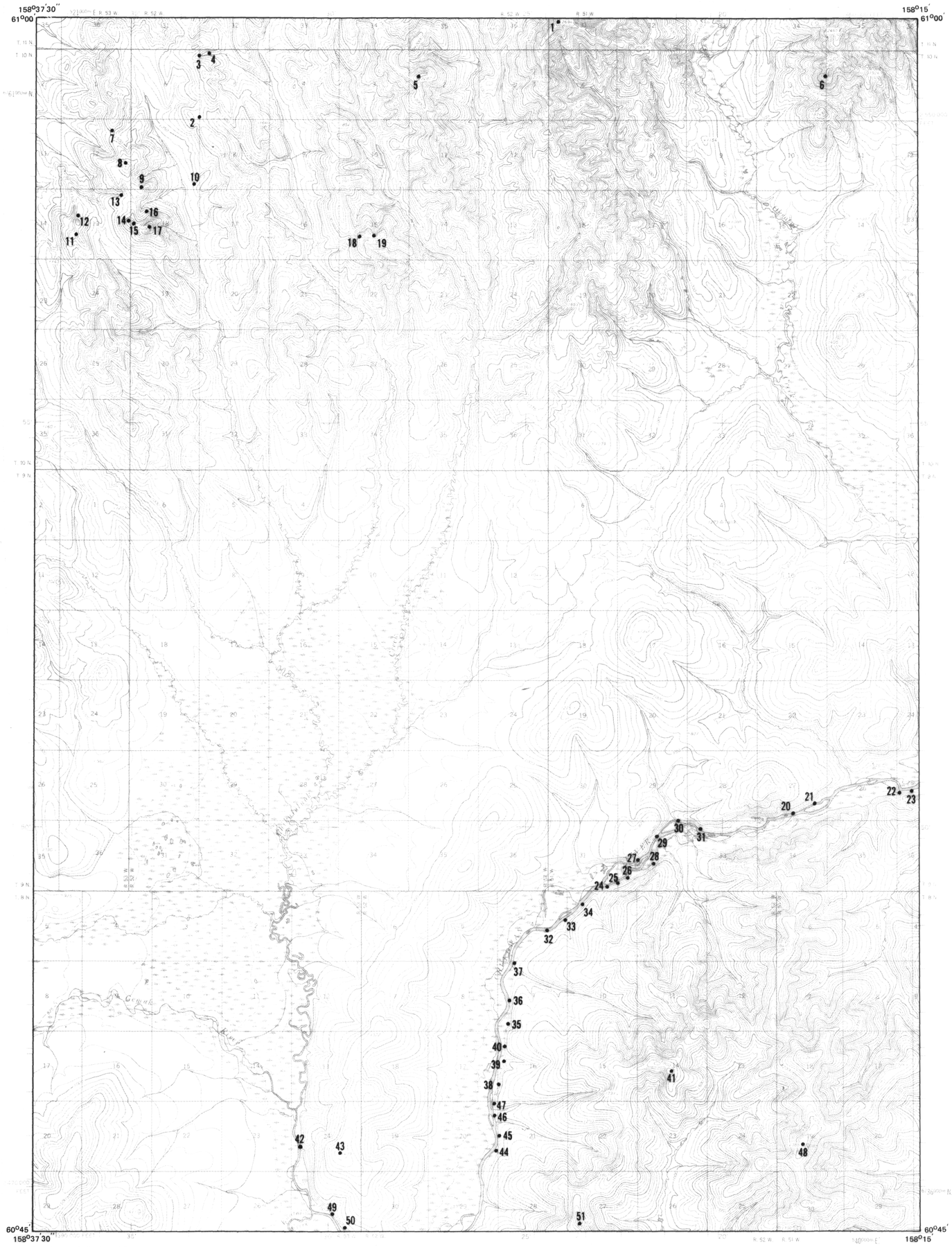
ALASKA DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS
IN COOPERATION WITH THE U.S. GEOLOGICAL SURVEY

REPORT OF INVESTIGATIONS 85-3
TAYLOR MOUNTAINS D-7 QUADRANGLE



Base from U.S. Geological Survey
Taylor Mountains D-7, 1954, Quadrangle, Alaska

This report is a preliminary publication of DGGS. The authors are solely responsible for its content and will appreciate candid comments on the accuracy of the data as well as suggestions to improve the report.

ALASKA

QUADRANGLE LOCATION

SCALE 1:63,360

1 0 1 2 3 4 MILES

1 0 1 2 3 4 5 KILOMETERS

CONTOUR INTERVAL 50 FEET

DASHED LINES REPRESENT 25-FOOT CONTOURS

DATUM MEAN SEA LEVEL

TRUE NORTH 21° MAGNETIC N

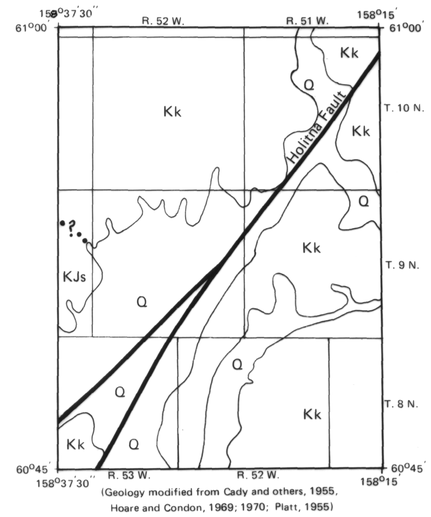
APPROXIMATE MEAN DECLINATION, 1954

32 – MAP SYMBOL
map number; corresponds to table number

INTRODUCTION

This map is one in a series of geologic data bases (scale 1:63,360) from southwest Alaska. The series is scheduled for release by DGGS during 1985. Each map is a summary of geologic field data, analytical data, fossil reports, resource information, and land status available for that quadrangle. Geologic data were obtained primarily from U.S. Geological Survey (USGS) field notes collected from 1941 to 1975. Field locations were replotted on modern topographic base maps from the original trimetrogon air photos and reconnaissance topographic maps. The map numbering sequence, which follows a normal written-page progression using the township and range mile-square blocks, starts in the northwest corner of the quadrangle and ends in the southeast corner. Where necessary, original station numbers were modified to fit the format: year, geologist, and field number (table 1). Original station numbers commonly consisted of the date followed by a number for each observation point, starting each day with number 1, for example, 6/11-1. The modified number preserves the original number, but adds the year and geologist to eliminate confusion and ambiguity. For example, 47Hr6/11-1 was the first station occupied by Joseph M. Hoare on June 11, 1947. Rock descriptions (table 2) and structural data (table 3) were compiled from field notes exactly as written; no attempt was made to modify or interpret the original data. We appreciate the review by M.S. Robinson (DGGS) and Stephen E. Box (USGS).

GENERALIZED DISTRIBUTION OF ROCK UNITS



(Geology modified from Cady and others, 1955, Hoare and Condon, 1969; 1970; Platt, 1955)

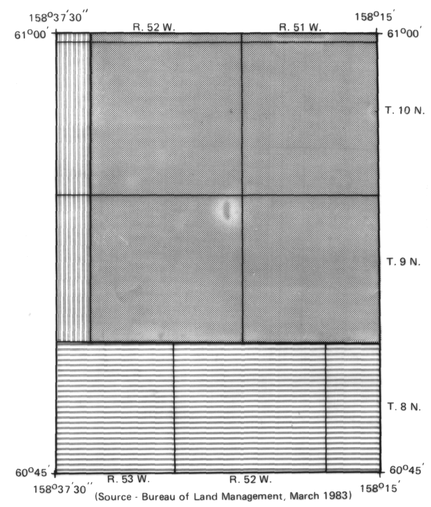
EXPLANATION

Q - Quaternary deposits

Kk - Kuskokwim Group sedimentary rocks

KJs - Argillite and graywacke

LAND STATUS



(Source - Bureau of Land Management, March 1983)

State selected

State tentatively approved

State patented

Table 1. Correspondence of map numbers with field stations.

Map no.	Field station*	Map no.	Field station*	Map no.	Field station*
1	70Hr87	15	45Hr7/17-2	33	43Hx8/2-12
	70Ca195		45Ca7/17-2	34	43Hx8/2-13
2	45Ca7/16-7	16	45Hr7/17-1	35	43Hx8/2-8
	45Hr7/16-7		45Ca7/17-1	36	43Hx8/2-9
3	45Hr7/16-6	17	70Hr65	37	43Hx8/2-10
4	45Ca7/16-6		70Co199	38	43Hx8/2-5
5	70Co196	18	70Co198	39	43Hx8/2-6
	70Hr88	19	70Co197	40	43Hx8/2-7
6	70Co194		70Hr89	41	70Hr77
	70Hr86	20	43Hx8/2-22		70Co184
7	70Hr69	21	43Hx8/2-23	42	43Hx8/1-1
8	70Hr68	22	43Hx8/2-24	43	70Co182
9	70Hr67	23	43Hx8/2-25	44	43Hx8/2-1
10	45Ca7/16-8	24	43Hx8/2-14	45	43Hx8/2-2
	45Hr7/16-8	25	43Hx8/2-15	46	43Hx8/2-3
11	45Hr7/17-5	26	43Hx8/2-16	47	43Hx8/2-4
	45Co7/17-5	27	43Hx8/2-17	48	70Co185
12	45Hr7/17-4	28	43Hx8/2-18	49	43Hx8/1-2
	45Ca7/17-4	29	43Hx8/2-19	50	43Hx8/1-3
13	45Ca7/17-3	30	43Hx8/2-20	51	70Co183
	45Hr7/17-3	31	43Hx8/2-21		70Hr76
14	70Hr66	32	43Hx8/2-11		

*Year-geologist-month/day-field number or year-geologist-field number; Hr = Joseph Hoare, Co = W.H. Condon, Hx = C.A. Hickcox, Ca = W.M. Cady.

Table 2. Rock descriptions from field notes.

Map no.	Rock description	Map no.	Rock description
1	Interbedded, fine- and medium-grained graywacke (one 14-in.-thick, highly calcareous bed) and shaley argillite	21	Massive graywacke and interbedded shale
2	Black shale with subconchoidal bedding-plane fracture	22	Massive graywacke and interbedded shale
3	Interbedded shale and graywacke with thin to massive, subconchoidially fracturing claystone and mudstone	23	Interbedded, massive graywacke and shale
4	Black shale with minor graywacke	24	Graywacke
5	Dominantly black shale with graywacke (locally calcareous beds to 4 in. thick)	25	Graywacke
6	Fine- and medium-grained graywacke	26	Interbedded, massive graywacke and shale in small antiform
7	Black shale and thinly cross-bedded graywacke (locally calcareous)	27	Interbedded, massive graywacke and shale
8	Thin-bedded graywacke with minor cross-bedding	28	Interbedded, massive graywacke and shale
9	Thin-bedded (0.5-1.0 in.), fine- and medium-grained graywacke with shale cross-bedding and fragments	29	Folded, massive graywacke and interbedded shale
10	Massive and thin-bedded shale with subconchoidal bedding-plane fracture	30	Interbedded graywacke and shale
11	Mudstone to argillite and aphanitic, vesicular basalt sill (25 ft thick)	31	Massive graywacke and interbedded shale
12	Interbedded graywacke and shale with subconchoidal bedding fracture	32	Interbedded graywacke and shale
13	Massive and thin-bedded claystone and argillite with subconchoidal bedding fracture	33	Interbedded graywacke and shale
14	Thin-bedded, fine- and medium-grained graywacke with diabase dike	34	Interbedded graywacke and shale
15	Massive argillite and claystone with subconchoidal bedding fracture	35	Interbedded graywacke and shale
16	Thin-bedded graywacke, shale, and basalt float	36	Interbedded graywacke and shale in antiform
17	Diabase sill with iron staining below contact	37	Interbedded graywacke and shale
18	Cross-bedded graywacke, siltstone (locally limy)	38	Interbedded graywacke and shale
19	Massive, cross-bedded graywacke and siltstone (locally limy)	39	Interbedded graywacke and shale
20	Massive graywacke and interbedded shale	40	Massive graywacke
		41	Thin-bedded, calcareous(?) graywacke
		42	Massive graywacke
		43	Graywacke
		44	Interbedded graywacke and shale
		45	Interbedded graywacke and shale
		46	Interbedded graywacke and shale
		47	Interbedded graywacke and shale
		48	Slabby-weathering graywacke
		49	Massive graywacke
		50	Interbedded, massive graywacke and shale
		51	Thin-bedded, slabby-weathering, calcareous(?) graywacke

Table 3. Structural data.

Map no.	Attitude of bedding and volcanic flow planes (f)	Other structural data	Map no.	Attitude of bedding and volcanic flow planes (f)	Other structural data
1	N10E, 30SE		25	N45W, 85SW	
2	N20W, 75NE		26	N85W, 26NE	
3	N14E, 49NW		27	N61E, 74SE	
4	N33E, 63NW		28	N88E, 51NW	
5	N20W, 68NE		29		fold axis N32W, ??SW
6	N10E, 65SE		30	N30W, 46NE	
	N10E, 60SE		31	N25W, 52NE	
8	N28W, 35SW		32	N12W, 60NE	
9	N05E, 55NW		33	N35W, 77NE	
10	N17W, 35NE		34	N60W, 70SW	
11	N13W, 62SW		35	N80W, 80NE	
12	N47W, 45SW		36	N80W, 80NE	
13	N05W, 58NE		37	N77E, 46SE	
14	N30E, 45NW		38	N85E, 70SE	
15	N30W, 29SW		39	N15W, 70NE	
16	N05W, 73SW		40	N62E, 78SE	
17	N40W, 40SW		42	N03E, 55SE	
19	N20E, 40SE		44	N40W, 85SW	
20	N06W, 85SW	right side up	45	N40W, 65NE	
	N28W, 83SW	right side up	46	N10E, 15SE	
21	N50W, 45W		47	N60W, 80NE	
22	N25W, 40SW		49	N25E, 70SE	
23	N35W, 35NE		50	N11W, 69SW	right side up
24	N30E, 80SE				

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Cady, W.M., Wallace, R.E., Hoare, J.M., and Webber, E.J., 1955, The central Kuskokwim region, Alaska: U.S. Geological Survey Professional Paper 268, 132 p.

Hoare, J.M., and Condon, W.H., 1969, Taylor Mountains D-8 Quadrangle field maps and notes: U.S. Geological Survey unpublished data, scale 1:63,360, 1 sheet.

Hoare, J.M., and Condon, W.H., 1970, Taylor Mountains D-8 Quadrangle field maps and notes: U.S. Geological Survey unpublished data, scale 1:63,360, 1 sheet.

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COMPILATION OF GEOLOGIC DATA FROM THE TAYLOR MOUNTAINS D-7 QUADRANGLE, SOUTHWESTERN ALASKA

Compiled by

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1985